

Notice of Allowability

Application No.

09/868,270

Examiner

Kandasamy Thangavelu

Applicant(s)

GORDON, GRAHAM PAUL

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10 May 2005.
2. ☒ The allowed claim(s) is/are 1-5 and 7-13.
3. ☒ The drawings filed on 14 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>17 September 2001</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Introduction

1. This communication is in response to the Applicant's communication dated May 10, 2005. Claims ^{1-5 and 7-13}~~1-13~~ of the application are pending.

Reasons for Allowance

2. Claims 1-5 and 7-13 of the application are allowed over prior art of record.
3. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The closest prior art of record shows:

(1) reverse engineering method for gradual transition of procedural programs to object-oriented architectures; using reverse engineering technology for obtaining reusable components from existing systems; automating a transition from conventional technology to object-oriented technology to support maintainability of old procedural programs and reusability by enabling extraction of reusable components from existing systems; using object-oriented domain engineering methods for identification of objects; using intermediate representations for stepwise increase of the level of abstraction; obtaining additional information from the application domain for system transformation process using a human expert (Gall et al., "Balancing in reverse

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engineering and in object-oriented systems engineering to improve reusability and maintainability”, IEEE 1994);

(2) reverse engineering existing code into abstract syntax trees (AST), using grammar based parsers and lexical analyzers; abstract trees having nodes with various attributes; creating reverse engineering systems that can automatically construct abstract syntax trees from the source code; reducing the effort required to create, display and modify information in the ASTs; a set of commands for constructing and assigning attributes to nodes and subtrees in ASTs (Scandura, U. S. Patent 6,061,513);

(3) specialized reverse engineering tools to parse existing source code and generate detailed information; means for converting software entities and their relationships into a graph having a structure of nodes interconnected by edges; automatically generating fresh graphs after manipulation; a dependency analysis system comprising a node class for instantiating node objects representing aspects of the analyzed system and a connection class for instantiating dependency between aspects of the analyzed system; an edge class instantiates edge objects representing connections ; a data structure to store a hierarchy of graphs (Chedgy et al., U.S. Patent Application 2004/0205726); and

(4) reverse engineering an existing system into a conceptual model to build a higher-level understanding of how components work and interact; reverse engineering techniques to reuse existing system components; the goals of reverse engineering are: to determine which parts of the existing systems must be replaced and which can be used and to extract components for reuse; reverse engineering provides important input to the design and construction processes;

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reverse engineering the existing software to capture existing design information (**Bowman-Amuah**, U.S. Patent Application 2001/0052108).

Additional state of the art reviewed and considered by the Examiner is found in U.S. Patent 6,061,513; U.S. Patent 6,038,393; U.S. Patent Application 2004/0205726; U.S. Patent Application 2004/0210445; U.S. Patent Application 2001/0052108; U.S. Patent 6,199,198; U.S. Patent 6,163,776; U.S. Patent 6,535,915; U.S. Patent 6,385,766; U.S. Patent 6,515,304; Aiken et al., "A framework for reverse engineering DOD Legacy information systems", IEEE, 1993; Canfora et al., "A reverse engineering method for identifying reusable abstract data types", IEEE, 1993; Yang, "The supporting environment for a reverse engineering system- The maintainer's assistant", IEEE, 1991; Chu et al., "Component reuse through reverse engineering and semantic interface analysis", IEEE, 1995; Huang et al., "A rule-based tool for reverse engineering from source code to graphical models", IEEE, 1992; Nagaoka et al., "A reverse engineering method and experiences for industrial COBOL system", IEEE, 1997.

None of these references taken either alone or in combination with the prior art of record discloses a simulation system for a mobile communication network and a method for simulating a mobile communication network, specifically including:

"examining from selected entry points the network structure forming the application system by tracking chains of nodes and links, each chain being tracked until the instance of a node that does not have a link or the return of the chain to a previously examined node, then

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reverse tracking the chain to a node from which another chain extends and selectively tracking said other chain”.

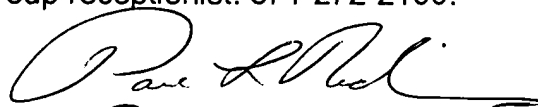
4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.”

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.

K. Thangavelu
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July 23, 2005


Paul L. Rodriguez 7/25/05
Primary Examiner
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